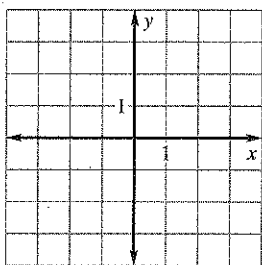
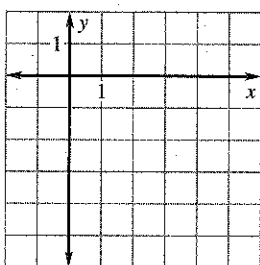


LESSON
4.2**Practice C** *continued*
For use with pages 245–251

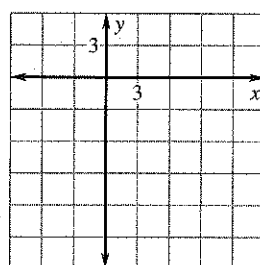
13. $y = -\frac{1}{2}(x - 3)(x + 2)$



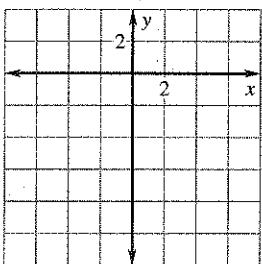
14. $y = 5\left(x - \frac{2}{5}\right)\left(x - \frac{11}{5}\right)$



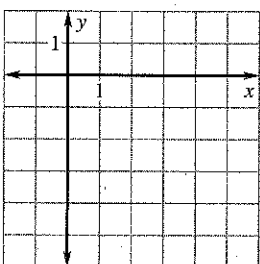
15. $y = 1.5(x - 3.3)(x + 2.7)$



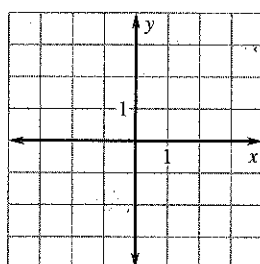
16. $y = (2x - 4)(2x + 2)$



17. $y = (3x - 1)(x - 3)$



18. $y = -\frac{2}{3}x(4x + 3)$

**Write the quadratic function in standard form.**

19. $y = 3(x - 1)^2 + 5$

20. $y = -\frac{5}{4}(x + 4)^2 + 15$

21. $y = \frac{4}{3}(x - 2)^2 - 5$

22. $y = \frac{5}{2}(x - 6)(x - 2)$

23. $y = 4\left(x + \frac{3}{2}\right)\left(\frac{3}{4}x + \frac{1}{4}\right)$

24. $y = -2.5(x - 1.3)(x + 5.2)$

25. **Number Theory** Every odd integer can be represented as $2n + 1$ where n is an integer. Write the product p of two consecutive odd integers as a quadratic function in intercept form.

In Exercises 26 and 27, use the following information.

Golf The flight of a particular golf shot reached a maximum height of 22.5 yards and the golf ball landed 300 yards from the point of impact. Assume the point of impact is $(0, 0)$.

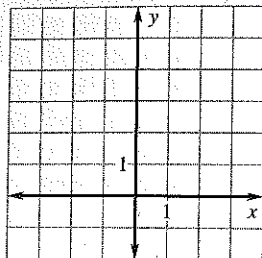
26. Write a quadratic function $y = a(x - p)(x - q)$ that represents the flight of the ball.
27. If the golf ball reached the same maximum height and landed 250 yards from the point of impact, would you expect the new value of a to be greater than or less than the value of a from Exercise 26?

LESSON
4.2**Practice C**

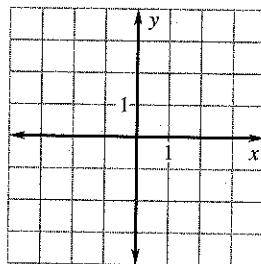
For use with pages 245–251

Graph the function. Label the vertex and axis of symmetry.

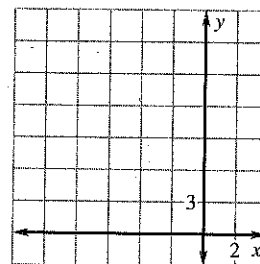
1. $y = 2(x + 1)^2 + 1$



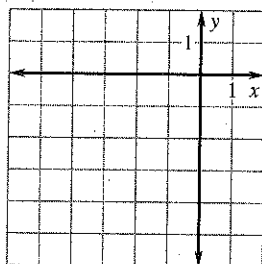
2. $y = -3(x - 2)^2 + 2$



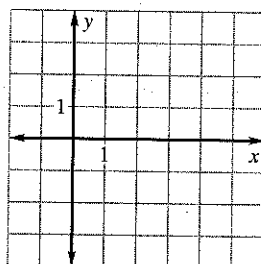
3. $y = -(x + 4)^2 + 14$



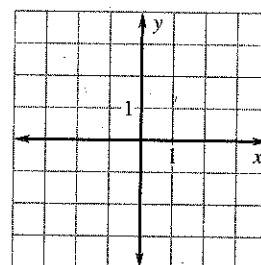
4. $y = -\frac{1}{2}(x + 2)^2 - 1$



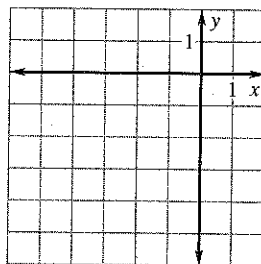
5. $y = \frac{2}{3}(x - 2)^2 - \frac{5}{3}$



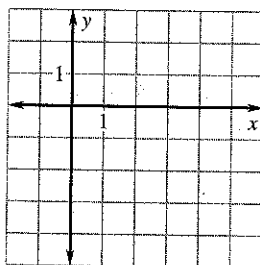
6. $y = -2\left(x - \frac{3}{2}\right)^2 + \frac{3}{4}$



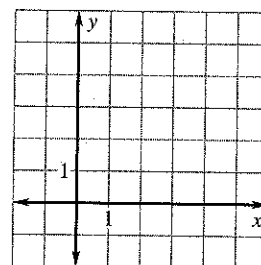
7. $y = -0.25(x + 1.5)^2 - 1.25$



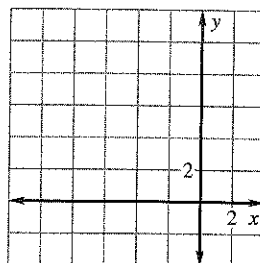
8. $y = 1.6(x - 2.25)^2 - 3$



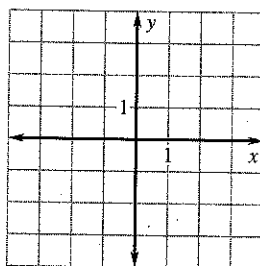
9. $y = -2.4(x - 3.2)^2 + 4.1$

**Graph the function. Label the vertex, axis of symmetry, and x-intercepts.**

10. $y = -2(x + 2)(x + 6)$



11. $y = -(x - 2)(x + 1)$



12. $y = 3(x - 2)(x - 5)$

